July 20, 2018

TO: Members, Subcommittee on Energy

FROM: Committee Majority Staff

RE: Hearing entitled "DOE Modernization: Legislation to Authorize a Pilot Project to

Commercialize the Strategic Petroleum Reserve."

#### I. INTRODUCTION

The Subcommittee on Energy will hold a hearing on Tuesday, July 24, 2018, at 10:15 a.m. in 2322 Rayburn House Office Building. The hearing is entitled, "DOE Modernization: Legislation to Authorize a Pilot Project to Commercialize the Strategic Petroleum Reserve."

# II. WITNESSES

#### PANEL I

• Steven E. Winberg, Assistant Secretary of Fossil Energy, Department of Energy.

#### **PANEL II**

- Daniel M. Evans, Project Manager, Fluor Federal Petroleum Operations;
- **Frank Rusco**, Director, Natural Resources and Environment, Government Accountability Office; and,
- **Kevin Book**, Managing Director, ClearView Energy Partners.

### III. BACKGROUND

# A. Strategic Petroleum Reserve

The Strategic Petroleum Reserve (SPR) is a stockpile of government-owned petroleum managed by the Department of Energy (DOE) that Congress authorized as a response to gasoline supply shortages and price spikes associated with the Organization of Arab Petroleum Exporting Countries 1973-1974 oil trade embargo. The Energy Policy and Conservation Act of 1975 (EPCA) authorized the SPR to reduce the impact of disruptions in supplies of petroleum products and to carry out U.S. obligations under the 1974 Agreement on an International Energy Program.<sup>1</sup> EPCA authorizes the President to draw down the SPR upon finding that there is a "severe supply interruption."

<sup>&</sup>lt;sup>1</sup> See International Energy Agency, <u>Agreement on an International Energy Program</u>.

The SPR's crude oil storage facilities are comprised of 62 underground caverns mined in naturally occurring salt domes. Two sites are located in Texas, and two in Louisiana (Figure 1). The sites offer access to marine terminals and pipeline systems to move crude oil to and from the SPR. The SPR currently holds 660 million barrels (MMbbl) of crude oil, representing 176 days of net import protection.<sup>2</sup> DOE also maintains the Northeast Gasoline Supply Reserve (NGSR), which holds 1 MMbbl of gasoline. The NGSR was established by Secretary Moniz in 2014, without Congressional authorization, using funds collected from a test sale of SPR crude oil. The NGSR is currently operating under temporary authority provided by Congress.<sup>3</sup>

The U.S. exceeds its obligation as a member of the International Energy Agency (IEA) under the International Energy Program to maintain at least 90 days of strategic stocks. In the face of declining net U.S. imports, a 70 percent reduction from 2005 peak levels, Congress has taken steps to reduce the size of the SPR. <sup>4</sup> Congress has also authorized an investment of up to \$2 billion to carry out an SPR modernization program known as Life Extension II. The purpose of Life Extension II is to modernize aging SPR infrastructure through system upgrades and equipment replacement. According to DOE testimony delivered in November 2017, the project had an estimated cost range of \$750 million – \$1.4 billion with an estimated completion date range between FY 2022 and FY 2024.<sup>5</sup>



Figure 1. Storage Sites and Distribution System

<sup>&</sup>lt;sup>2</sup> Based on 2017 U.S. net imports of crude oil and refined products.

<sup>&</sup>lt;sup>3</sup> H.R. 1625, Consolidated Appropriations Act of 2018. (P.L. 115-141).

<sup>&</sup>lt;sup>4</sup> See Energy Information Administration. <u>U.S. Net Imports of Crude Oil and Petroleum Products</u>. U.S. net imports declined from an average of 12.5 MMbbl/day in 2005 to 3.7 MMbbl/day in 2017.

<sup>&</sup>lt;sup>5</sup> See <u>Testimony of Deputy Assistant Secretary Robert Corbin</u>, U.S. Department of Energy, before the Subcommittee on Energy, November 2, 2017.

# B. Congressionally-Mandated Sales

Congress has passed several laws mandating the sale of crude oil from the SPR. These sales, totaling an estimated \$16 billion, are projected to reduce the SPR's inventory from the current level of 660 MMbbl to approximately 400 MMbbl over the next decade, provided the drawdowns do not limit the ability of the SPR to prevent or reduce the adverse impact of an energy supply shortage (Figure 2, Table 1).

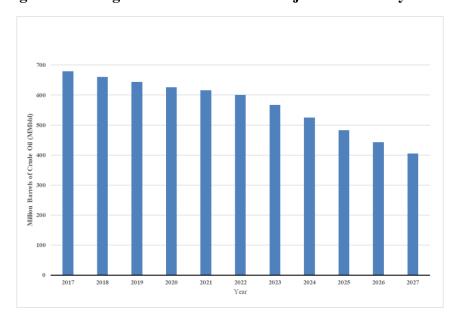


Figure 2. Strategic Petroleum Reserve Projected Inventory

**Table 1. Summary of Mandated Crude Oil Sales** 

|   | <b>'17</b> | '18  | '19 | '20  | '21 | '22  | '23  | '24  | '25  | '26 | '27 | Total |
|---|------------|------|-----|------|-----|------|------|------|------|-----|-----|-------|
| Bipartisan Budget Act 2015<br>Section 404 (Estimate)* | 6.3        | 4.7  | 5*  | 7.5* | 0   | 0    | 0    | 0    | 0    | 0   | 0   | 23.5  |
| Bipartisan Budget Act 2015<br>Section 403             | 0          | 5    | 5   | 5    | 5   | 8    | 10   | 10   | 10   | 0   | 0   | 58    |
| FAST Act  | 0          | 0    | 0   | 0    | 0   | 0    | 16   | 25   | 25   | 0   | 0   | 66    |
| Cures Act   | 9.9        | 9.2  | 6   | 0    | 0   | 0    | 0    | 0    | 0    | 0   | 0   | 25.1  |
| Tax Cuts and Jobs Act                                 | 0          | 0    | 0   | 0    | 0   | 0    | 0    | 0    | 0    | 4   | 3   | 7     |
| Bipartisan Budget Act of 2018                         | 0          | 0    | 0   | 0    | 0   | 7.5  | 7.5  | 7.5  | 7.5  | 35  | 35  | 100   |
| Consolidated Appropriations<br>Act of 2018            | 0          | 0    | 0   | 5    | 5   | 0    | 0    | 0    | 0    | 0   | 0   | 10    |
| Total   | 16.2       | 18.9 | 16  | 17.5 | 10  | 15.5 | 33.5 | 42.5 | 42.5 | 39  | 38  | 289.6 |

**Note:** For Bipartisan Budget Act Section 404 sales in the future, quantities are based on \$60/barrel. Projected SPR inventory in FY 2028 is approximately 405 million barrels.

# C. Issues for Congress

The Energy and Commerce Committee has been actively engaged in efforts to modernize the SPR. The SPR represents the world's largest government-owned stockpile of oil and one of the nation's most valuable energy security assets; however, it faces significant operational challenges as a result of changing crude oil markets and infrastructure constraints. A recent DOE Report to Congress explored these challenges and revealed that the effective distribution capacity of the SPR could be more than 2 MMbbl below the design drawdown rate of 4.4 MMbbl per day in certain oil disruption scenarios. These findings suggest that the SPR may have difficulty meeting its energy security mission.

Given the significant federal investment in the SPR, and the need for Congress to evaluate whether the SPR should be maintained in its current configuration, the Committee requested that the Government Accountability Office (GAO) undertake an assessment of the SPR and identify options to more efficiently and cost-effectively meet U.S. energy security needs and comply with international obligations to release stocks and share available oil in the event of a major supply disruption. In June 2018, GAO issued five recommendations relating to the SPR. GAO recommended that Congress consider setting a long-range target for the size and configuration of the SPR that takes into account future market conditions. GAO also recommended that DOE improve its approach to studying and planning the future of the stockpile, and consider a full range of options for handing potentially excess assets.

Commercializing excess SPR storage capacity through a leasing program offers several potential advantages. As DOE withdraws oil to meet congressionally mandated sales – approximately 300 MMbbl by 2028 – underutilized SPR facilities could be leased to a private company to generate revenue and offset operations and maintenance costs. Commercial leaseholders may also invest in infrastructure upgrades to improve the SPR's distribution capacity in order to move petroleum products to market more efficiently. DOE could also consider leasing excess storage capacity to other countries so that they could store oil at the SPR to help mitigate a global supply emergency.

### IV. SUMMARY OF LEGISLATION

A. H.R. \_\_\_\_\_, To require the Secretary of Energy to carry out a program to lease underutilized Strategic Petroleum Reserve facilities, and for other purposes

The legislation amends Section 168 of the Energy Policy and Conservation Act to authorize the Secretary of Energy to carry out a program to lease underutilized SPR facilities to the private sector or foreign governments. The legislation includes protections to ensure that leases do not impair national security or the ability of the Secretary to utilize the SPR in response

<sup>&</sup>lt;sup>6</sup> Department of Energy, U.S. Strategic Petroleum Reserve Long-Term Strategic Review. (August 2016).

<sup>&</sup>lt;sup>7</sup> See <u>Letter</u> from Chairman Fred Upton and Ranking Member Pallone to Comptroller General Gene Dodaro, dated December 22, 2016.

<sup>&</sup>lt;sup>8</sup> Government Accountability Office. <u>Strategic Petroleum Reserve: DOE Needs to Strengthen Its Approach to Planning the Future of the Emergency Stockpile</u>. (June 28, 2018).

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to an energy emergency. The legislation also establishes a pilot program to lease SPR capacity for up to 200 MMbbl of petroleum products.

# V. STAFF CONTACTS

If you have any questions regarding this hearing, please contact Peter Spencer, Brandon Mooney, or Mary Martin of the Majority Committee staff at (202) 225-2927.